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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

SEMIR S. HADDAD

S. Serial No.

09/943,837

Filed

August 31, 2001

For

SYSTEM FOR MULTIPLEXING VIDEO DATA STREAMS IN

A DIGITAL VIDEO RECORDER AND METHOD OF

OPERATING THE SAME

Art Unit

2621

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Examiner

Mishawn N. Dunn

MAIL STOP AF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal. The review is requested for the reason(s) stated in the arguments below, demonstrating the clear legal and factual deficiency of the rejections of some or all claims.

Claims 1-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over what the Examiner characterizes as "Applicant's admitted prior art" (hereafter "APA") in view of Citta et

al. (U.S. Patent No. 5,602,595), hereinafter "Citta". For the convenience of the panel, claim 1 is reproduced below:

1. (Original) For association with a digital video recorder, a controller that multiplexes packetized elementary streams into a multiplexed program stream, said packetized elementary streams comprising PES packets of disparate size, said controller operable to (i) receive said PES packets into a memory buffer, (ii) reformat each of said received PES packets into at least one fixed-size program packet having a header and a payload, said header defining a payload content, and (iii) associate ones of said at least one fixed-size program packets into said multiplexed program stream.

The "Background of the Invention" section of the application as filed describes conventional MPEG-2 compression. In particular, it describes the MPEG-2 packetized elementary stream (PES) on page 7, including that the PES includes packet header 405, optional PES header 410, and associated packet data 415. Packet header 405 comprises packet start code prefix 420, stream identifier (ID) 425, and PES packet length indicator 430. All of the fields after PES packet length indicator 430 are optional. Because the PES includes numerous optional fields, it is in no way a "fixed-size program packet" as described in independent claims 1, 6, 11, and 18. Nothing in the background section of the specification, which the Examiner characterizes as "admitted prior art," describes reformatting PES packets of disparate size into fixed-size program packets, as required by each independent claim.

The Examiner now suggests that Citta discloses a suitable fixed-size program packet. Citta describes a system that encodes variable length elementary streams of data into a multilevel symbol signal comprising a plurality of multiplexed fixed length data packets without sync information. The

fixed length data packets are arranged in fields of repetitive data segments, each of which includes a data segment sync and each field of which includes a field sync.

While Citta includes a fixed-length packet, the header of Citta's packet does not define the payload content, as claimed. Citta discloses a packet having a 4 byte header at the beginning of the packet, with the first byte of the header being the MPEG sync byte. The header also includes a 13 bit packet identifier (PID). Citta also discloses a packet having a 3 byte header and a 184 byte payload. Citta does not teach or suggest a fixed-length packet having a header and payload, where the header defines the payload content, as required by claim 1. As such, claim 1 and its dependents clearly distinguish over any combination of APA and Citta, and the rejection is legally and factually deficient.

Examiner Dunn alleges that "one of ordinary skill in the art would readily recognize that the purpose of a header is to define and handle the payload". As a general statement, this is simply incorrect, and Citta itself describes a packet having a header and a payload, where the header does not define the payload. As such, it is clear that this specific characteristic of a header is not inherent, as it is not necessarily present in any given header.

The only header field described in APA as specifically regarding the payload is "Stream ID 425", that provides "payload identification", distinct from the claimed "defining a payload content". Further, there is no teaching or suggestion that the header fields of the packets discussed in APA has any relation to the packets or payloads of the packets described in Citta. There is no teaching, suggestion, or motivation to modify Citta's packet structure to include any headers as described in APA, nor is there any indication that such a combination would even be operable. Examiner Dunn

does not even attempt to discuss the implications, viability, or desirability of so modifying Citta's

header, illustrating the legal and factual deficiency of the rejection.

Claim 3 requires that the fixed size of said at least one fixed-size program packets is a

multiple of a sector size of said storage disk. Examiner Dunn alleges that "it would be obvious to

one of ordinary skill in the art, to have at least one fixed-size program packets is a multiple of a

sector size of said storage disk, in order to increase the recording capacity." This statement is

unsupported in any cited art, illustrating the legal and factual deficiency of the rejection. In the

Advisory Action, Examiner Dunn alleges that two new references teach "writing a plurality of

packets to one sector." This is clearly irrelevant to the claim limitation.

Because each independent claim includes limitations not found in any cited art, and not

described or in any way "admitted" by the Applicant as prior art, the rejections are all legally and

factually deficient, and all independent claims and their respective dependent claims should be

allowed over all art of record.

Examiner Dunns's original general statement of motivation for combining APA and Citta

was unsupported in the art, and generally factually incorrect, as Examiner Dunn now concedes.

Examiner Dunn's new "motivation" for combining Citta with APA, as stated in the Advisory Action,

is that such a combination would "decrease recording efficiency, but would result in a less complex

reproducing operation." Examiner Dunn does not even allege that this is shown in the art, a legal

deficiency in itself, and it is of course unsupported. There is no teaching or suggestion in APA or

Citta, or in the knowledge of those of ordinary skill in the art, that adding a packet-reformatting

process according to Citta to the system of APA would be less complex than without the additional

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processing, even if that combination could reproduce the claim limitations (which it does not).

CONCLUSION

As a result of the foregoing, the Applicant asserts that the claims in the Application are in condition for allowance over all art of record, and that the rejections are both factually and legally deficient, and respectfully requests this case be returned to the Examiner for allowance or, alternatively, further examination.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Munck Butrus Deposit Account No. 50-0208.

Respectfully submitted,

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